

OHMART



FiberFlex™

**Continuous Nuclear
Level Detector**

with GEN2000™ Electronics

U.S. & Foreign Patent Pending

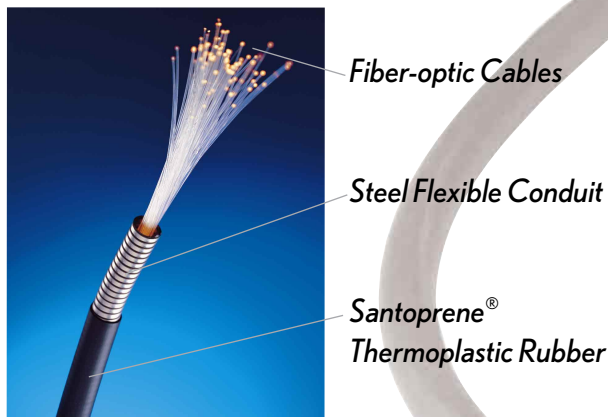
Features & Benefits

The FiberFlex™ is a different type of scintillation radiation level detector. As a scintillation detector, when radiation reaches the detector, light is emitted and measured. Scintillators have been used for many years for radiation detection, however, conventional scintillators have used rigid crystals as the scintillation material. The FiberFlex™ utilizes a special fiber-optic bundle as the scintillator. This innovative approach brings significant tangible advantages to the nuclear level gauge user over both solid scintillators and traditional ion chambers.

Features

Flexible

The use of the scintillation fiber-optic strands allow the FiberFlex™ to bend with a minimum radius of 12" (305mm).



Lightweight

The plastic scintillation fibers are lightweight. The most significant weight reduction is achieved by eliminating the need for a steel pipe housing. The fibers are encased in galvanized steel flexible conduit covered in Santoprene®, a thermoplastic rubber, which gives excellent strength and environmental resistance with very low weight.

High Sensitivity

As a scintillator, the FiberFlex™ provides a better response to lower radiation fields than traditional ion chambers, potentially reducing source sizes.

Long Length

Due to its unique flexible construction and high sensitivity the FiberFlex™ is available to a maximum length of 23' (7 meters).

Benefits

Eliminates Need for Cranes or Special Rigging

Low weight (maximum weight 40lbs. (18kg.)) greatly eases mounting and does not require cranes or other special equipment for installation.

Reduces Mounting Hardware & Structural Requirements

Lightweight FiberFlex™ eliminates the need for expensive and time-consuming structural work to support the detector.

Personnel Safety Enhanced by Low Weight

Low weight of equipment significantly lowers hazards associated with the mounting process.

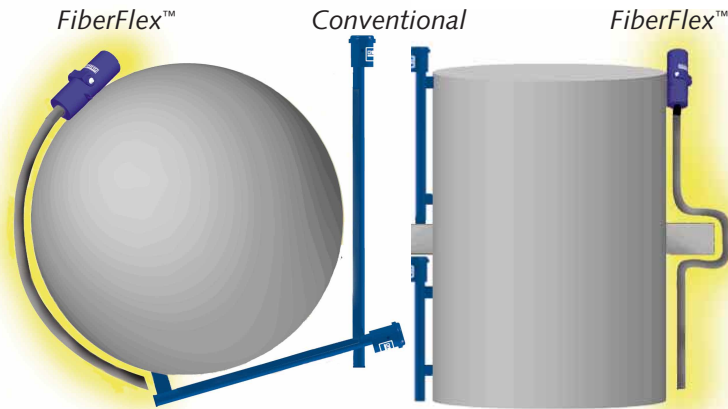
Reduced Shipping Costs

The low weight and ability to coil the FiberFlex™ allows it to be shipped by standard delivery services, eliminating the need for expensive truck shipments.



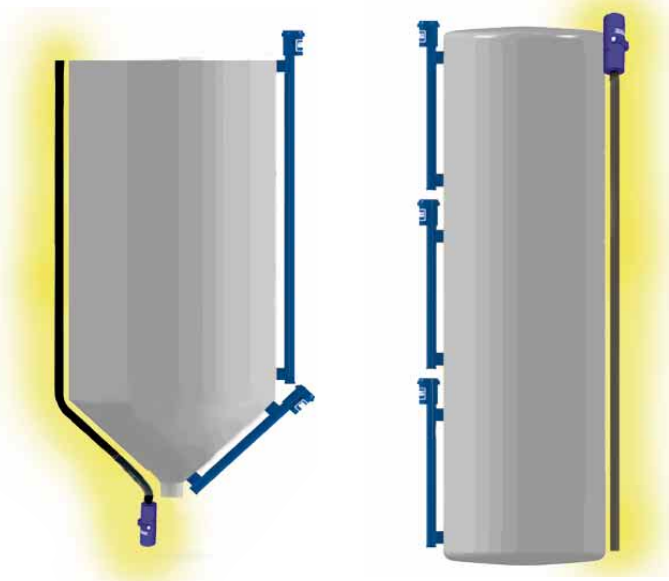
Mounts Easily on Curved Vessels

Flexibility allows mounting on cylindrical, spherical, conical, and other non-linear vessels.



Single Detector on Curved & Contoured Vessels

Single detector follows vessel contour, eliminating high cost for multiple detectors. In addition, multiple detector calibration problems and measurement "gaps" between detectors are eliminated.



Mounting Flexibility

O-ring sealed electronics housing permits mounting upside down for maintenance access.

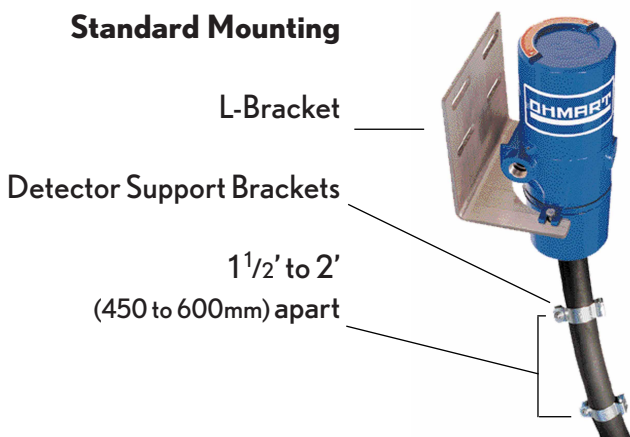
Mounts Around Structural Supports & Other Obstructions

Structural supports and other obstruction made it very difficult to mount rigid detectors. With FiberFlex™, most obstructions are easily bypassed.

Single Detector on Long Measurement Ranges

Previously the maximum length of most scintillators, was 80" inches (2032mm). With a measurement range of 23 feet (7 meters) the costs of equipment, wiring, and installation are all significantly reduced by using a single detector in place of several.

Standard Mounting



2" (51mm) Conduit Mounting with Air Purge for High Temperature Applications





Electronics

The GEN2000™ electronics is a new generation of compact, lightweight, and modular electronics utilized on the FiberFlex™ detectors as well as other level and density detectors in the future. The GEN2000™ output can be a frequency signal to a SmartPro, ProPac, or a remote HART® processor; a 4 to 20 mADC analog with HART® Protocol digital signal; or a Foundation Fieldbus digital signal. GEN2000™ has approval for hazardous location applications.

Cast Aluminum Compact Housing

- Cast aluminum housing is lightweight & compact
- Protected with an epoxy powder coated paint exterior finish

Modular Electronics

- Electronic boards are compact and modular
- Easy maintenance
- Design incorporates surface mounted component technology for increased vibration resistance.

Outputs include:

- 4 to 20 mADC with HART® Protocol communications
- Foundation Fieldbus digital protocol
- Frequency output for remote mounted SmartPro, ProPac, or Remote HART® Processor (RHP).

Universal Power Input:

- Power supply can be connected to an AC or DC input

O-ring Seal Design

- To prevent moisture infiltration and 360° orientation, the housing incorporates o-ring seals at the threaded connections.



4241 Allendorf Drive
Cincinnati, Ohio 45209
U.S.A.
(800) 367.5383 Toll Free within U.S.A. & Canada
(513) 272.0131 Telephone
(513) 272.0133 FAX within U.S.A. & Canada
+513.272.4386 FAX (International)

<http://www.ohmart.com> URL
info@ohmart.com E-Mail

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